China Medical Board: a century of Rockefeller health philanthropy

> "If science and education are the brain and nervous system of civilization, health is the heart. It is the organ that pushes the vital fluid to every part of the social organism."

Energised by these passionate words of adviser Frederick Gates at the inaugural Board meeting in 1913, John D Rockefeller launched the Rockefeller Foundation (RF), which would see health eventually command more than half of its budget in the first half of the 20th century.[1] A year later, the China Medical Board (CMB) was launched as RF's second major project, and endowed in 1928 as an independent foundation. CMB would eventually become RF's largest-ever financed project, and China the largest beneficiary country outside of the USA. CMB's centennial in 2014 seems timely and appropriate for both celebration and reflection.

CMB devoted more than three decades to establishing the Peking Union Medical College (PUMC) to spread modern medical sciences throughout China.[2,3] Historically, PUMC may claim several achievements. PUMC scientists purified ephedrine from the traditional Chinese herb *ma huang*, elucidated mechanisms of key tropical diseases, and discovered the hominid skull of Peking Man. PUMC engaged many leading scholars, including Johns Hopkins' Dean William Henry Welch, President of Peking University Hu Shih, pioneers of rural barefoot doctors John Grant and C C Chen, and distinguished Harvard physiologist Walter Bradford Cannon.[1,4,5] The intent from the outset was Chinese ownership, operations, and financing, and a full Chinese faculty at PUMC was essentially completed by 1950.

Apart from a hiatus between 1950 and 1980, CMB was a continuous presence in China and over the years supported 118 medical schools in 17 Asian countries, 28 of them in China. CMB's work has focused on capacity building by providing facilities, educational material, laboratories, fellowships, and faculty development. Over 100 years, CMB is estimated to have invested US$1·5 billion (in 2011 dollars) in the region.[5] With its remaining endowment of more than $200 million, CMB continues its work with two dozen medical universities in China and neighbouring countries of southeast Asia.

RF's global work paralleled CMB's efforts in Asia. The independent Rockefeller University also received an endowment in 1928. After publication of the 1910 Flexner Report, RF pioneered reform of medical education and then, on the basis of the 1915 Welch-Rose Report, established independent schools of public health.[6,7] RF can be credited with the modernisation of medical, nursing, and public health education in many key institutions worldwide. Over the ensuing decades, RF also helped to build new health disciplines—for example, psychiatry, molecular biology, and population studies.[1,5]

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In parallel with institution building, RF launched infectious disease control through case detection, surveillance, prevention, treatment, monitoring, and evaluation. The first campaign for eradication of hookworm disease pioneered a model that would be applied subsequently to malaria, yellow fever, and tuberculosis—a harbinger of contemporary smallpox and polio eradication campaigns.[8] RF also invested in research and development for new vaccines and drugs. RF financed the Oxford laboratory of Howard Florey and Ernst Chain that was instrumental in the discovery of penicillin, and RF staff member Max Theiler developed the yellow fever vaccine; both research efforts were recognised with a Nobel Prize in Physiology or Medicine in 1945 and 1951, respectively.[9,10]

With bold vision and grand ambition, RF aspired to transform society through modern techniques, science,

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management, and new organisations. Moulded by its time, RF's work displayed persistence and durability, not quick fixes. Quality was steadfastly sought, and its global scope was unprecedented for its time. To conduct its work, RF innovated in adopting modern business practices, including corporate structure, full-time staff, and strategic planning.

Rockefeller philanthropy, of course, experienced many failings of both commission and omission. Questionable choices included support for eugenics that bordered on racism, development of nuclear energy and weaponry, and work in labour relations even while police fired on striking workers in the Ludlow massacre at Rockefeller-owned commercial mines. Errors of omission ask the counter-factual question: what was missed that should have been done? More fundamentally, RF has been criticised for cultural imposition of American culture and values abroad; favouring elitism rather than equity; ideologically trying to vindicate capitalism; and investing in health to make the tropics safe for commerce.[11,12] For much of the 20th century, RF's leadership was identified as having strong relationships, albeit informal, with the US Government. Underlying these critiques is the basic charge that private interests were allowed to dominate public purpose.

Many lessons were learned. To achieve long-term solutions, not temporary relief, a "theory of social change" is necessary. Having a theory guides investment choices, such as pilot demonstrations, building or reforming institutions, development of new technologies, advocacy for public policies, and providing a clearing house of people and ideas. Social venture capital must take risks to blaze new trails, and seed investments must catalyse scaling up to achieve maximum social impact. Initial dependence on government to expand innovation had limitations, and later required alternatives such as non-governmental organisations and market mechanisms.

A second lesson is to consider the unpredictable and often surprising contextual changes of problems and actors. There were not just steady health advances, but sudden and dramatic epidemics, wars, and famine to be overcome. Increasingly, new and powerful actors emerged, such as WHO, UN agencies, multilateral banks, and new foundations. RF and CMB have sought to maintain relevance by responding with agility and flexibility to changing contexts. Periods of excellent philanthropic work (ie, university development, great neglected diseases, clinical epidemiology network, AIDS vaccine initiative, health equity, joint learning initiative, human resources for health, universal health coverage) have been punctuated by periods of mediocrity or stagnation.

It was the people—the personalities, predilections, experiences, and viewpoints of trustees, staff, and colleagues—that arguably have made the difference. Money cannot create new ideas nor, alone, translate ideas into action. In retrospect, successful staff members were generally more open to new ideas, creative, learned from their experiences, took risks, and nurtured positive relationships and work styles. Those with arrogance and a sense of self-certitude (an attitudinal illness some have called foundationitis) often failed to see blind spots. An open and questioning mind is essential, especially for funders who encounter a lack of honest feedback from grant seekers. Modesty is appropriate because financial power requires tact. Philanthropic officers enjoy a unique vantage point in seeing how institutions are positioned, and thus how they can be shaped to achieve particular social purposes.

The world is very different in 2014 than 100 years ago. China and much of Asia are becoming economic centres of the world. Life expectancy has doubled, and east Asia today has among the highest life expectancy in the world.[5] The Asian challenge is less how to import western knowledge but more how Asia itself can pioneer innovations for the 21st century.

The challenge for CMB is to craft an effective philanthropic strategy that harnesses three major forces. First, rather than simply transferring western knowledge to Asia, CMB should build on a century of trusting relationships to promote two-way learning. Networking, convening, and catalysing innovations to enhance knowledge flows in multiple directions can benefit all groups in our interdependent health world.

Second, CMB should seek strategic partnerships with others. Large foundations, notably the Bill & Melinda Gates Foundation, the Wellcome Trust, and Bloomberg Philanthropies, and new strategies, such as venture philanthropy, diaspora philanthropy, and e-philanthropy, are growing. Moreover, there is the explosive growth of philanthropy in China, which reportedly has 152 billionaires and more than 2 million millionaires.[13] With the accumulation of wealth

almost certain to continue and even accelerate, private philanthropy in China holds great promise for ushering in a new and exciting era.

Finally, all foundations, including CMB, are blessed with the freedom to exploit new social opportunities. The freedom is not only what money can buy, but what money can give in terms of independence to think, survey the field, and seek new solutions. Foundations are strange creatures since they are not driven by the accountability of the ballot box, scrutiny of the media, or even restrictive regulations. There are no automatic metrics for cost-effectiveness of philanthropic performance. Foundations have the freedom to dream, analyse, engage, and mobilise talent and resources for solutions. Such freedom, however, comes with responsibility. Ultimately, it is the people with that responsibility, not money alone, who are privileged to tackle the challenge of making a healthier world.

At his last RF Board meeting in 1929, Frederick Gates said:

> "When you die and come to approach the judgment of Almighty God, what do you think He will demand of you?... He will ask just one question: what did you do as a trustee of the Rockefeller Foundation?"[1]

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Since 2006 I have been President of the China Medical Board; I served as Executive Vice-President of the Rockefeller Foundation from 1997 to 2002.

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China's global health strategy

China has increasingly emerged as an important player in global health,[1] especially after the World Bank reclassified China as an upper-middle-income country in 2011. What is China doing for global health? Is China's engagement distinctive or similar to that of other countries? What does the evidence show about China's global health engagement? In this issue of *The Lancet*, Peilong Liu and coauthors[2] address these questions in a paper on global health with Chinese characteristics.

Like many developing countries, China does not have a documented global health strategy, but has set out some principles in line with its foreign policies.[3] Based on China's experience in the past and on research yielding fresh insights, China now needs to shape its global health strategy, participate broadly in global health, and mobilise the involvement of government agencies, civil society, the private sector, and individuals.

China's engagement in global health cannot be separated from its own history of health development. This is the very foundation and starting point of China's global health development, and a feature of its global health engagement. In the past 60 years, China's health

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